APPEAL TO THE REGIONAL FORESTER USDA FOREST SERVICE REGION SIX OF A DECISION OF THE DISTRICT RANGER OF THE SISTERS RANGER DISTRICT, DESCHUTES NATIONAL FOREST

League of Wilderness Defenders – Blue Mountains Biodiversity Project.	ns))
	In Re: Appeal of the FinalEnvironmental Impact Statement,
) and Record of Decision for the) Metolius Basin Forest Management
) Project on the Sisters Ranger
) District, Deschutes National Forest
VS.)
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)
Leslie Weldon, Forest Supervisor)
Deschutes National Forest)
P.O. Box 6010	
Bend, OR 97708-6010	
Deciding Officer)))

APPELLANT'S NOTICE OF APPEAL, REQUEST FOR RELIEF AND STATEMENT OF REASONS

DATED THIS 1st DAY OF SEPTEMBER, 2003.

NOTICE OF APPEAL

On July 2nd, 2003, Leslie Weldon, Forest Supervisor for the Deschutes National Forests issued a Final Environmental Impact Statement (FEIS) and Record of Decision (ROD) for the Metolius Basin Forest Management Project (Metolius Timber Sale), approving "Alternative 3-Modified" that would log 21.7 million board feet (Mbf) of timber across approximately 12,600 acres in the Upper Metolius and Why-chus watersheds, located on the Sisters Ranger District of the Deschutes National Forest (DNF). The Upper Metolius watershed is a Tier 1 Key Watershed. Several hundred acres of prescribed burning will also take place. The entire planning area is a late successional reserve (LSR), and all management activities will take place within the LSR boundaries.

Notice is hereby given pursuant to 36 C.F.R. § 215 that the below listed groups are appealing the decision by the Forest Supervisor to approve and implement the Metolius Timber Sale Final Environmental Impact Statement, Record of Decision, and the Metolius Timber Sale.

Karen Coulter

League of Wilderness Defenders - Blue Mountains Biodiversity Project

The Appellant believes that the Forest Supervisor's decision of July 2nd, 2003 is in error and not in accordance with the legal requirements of the Administrative Procedures Act (APA) Administrative Procedure Act, 5 U.S.C. §§ 551–559, 701–706, 1305, 3105, 3344, 4301, 5335, 5372, 7521 (1994 & Supp. IV 1998), the Clean Water Act (CWA) Federal Water Pollution Control Act, 33 U.S.C. §§ 1251–1387 (1994 & Supp. III 1997), the Endangered Species Act (ESA) Endangered Species Act of 1973, 16 U.S.C. §§ 1531-1544 (1994), the National Environmental Policy Act (NEPA) National Environmental Policy Act of 1969, 42 U.S.C. §§ 4321–4347d (1994 & Supp. III 1997), the National Forest Management Act (NFMA) National Forest Management Act of 1976, 16 U.S.C. §§ 472a, 521b, 1600, 1611–1614 (1994 & Supp. III 1997) (amending Forest and Rangeland Renewable Resources Planning Act of 1974, Pub. L. No. 93-378, 88 Stat. 476), and these statutes' implementing regulations. The proposed project also violates the Northwest Forest Plan (NWFP) and the Deschutes National Forest Land and Resource Management Plan (Deschutes LRMP or DLRMP).

The Appellant has a specific interest in this project. We have previously indicated our interest in this project by commenting throughout the planning process and continued involvement in management of the Deschutes National Forest (DNF). Appellant's continued interest and involvement in this project creates standing to appeal this decision according to 36 C.F.R. § 215.11(a)(2).

The Metolius Timber Sale directly and significantly affects the members and volunteers of the League of Wilderness Defenders – Blue Mountains Biodiversity Project. Our members and volunteers regularly use the project area and the surrounding areas for work, outdoor recreation, fisheries research, wildlife observation, and other forest-related activities. Implementation of the Metolius Timber Sale would adversely affects the Appellant because the proposed logging activities would result in degradation of fish and wildlife habitat and

recreational quality in and around the analysis area. Appellant has a long-standing and well-documented interest in the management of the area in which the Metolius Timber Sale is located.

REQUESTED RELIEF

- 1. That the record of decision for this project be withdrawn;
- 2. That this project be modified to meet the objections presented in Appellant's Statement of Reasons, including but not limited to:
 - A. Eliminate all units with detrimental soil conditions, or, in the alternative, eliminate ground-based harvest methods from such units;
 - B. Eliminate all larch restoration openings in Riparian Reserves and throughout the project area;
 - C. Eliminate all new (temporary) road construction or reconstruction;
 - D. Eliminate or modify (i.e., treat with a precommercial thinning prescription) all units which would log in old growth habitat and wildlife corridors; and
 - E. Eliminate all units near goshawk nests.
 - F. Eliminate all units in nesting, roosting, and foraging habitat for the northern spotted owl.
- 3. That this project is revised to ensure consistency with the Administrative Procedures Act, Clean Water Act, Endangered Species Act, National Environmental Policy Act, National Forest Management Act, these statutes' implementing regulations, and the amended Deschutes National Forest Land and Resource Management Plan.

Statement of Reasons

League of Wilderness Defenders – Blue Mountains Biodiversity Project (BMBP) would first like to address the tone of the FEIS. Although BMBP commends the Forest Service for its extensive efforts in involving the public in its decision, the Forest Service must be reminded that Congress created the National Forest system for the enjoyment of all the public, not just local groups. In discussing public concern regarding actions within the Late Successional Reserve (LSR), the FEIS points out that the dissenting members of the public were "primarily members of environmental organizations who reside outside of the local area." Metolius FEIS, 33. Concerns addressed by the public, regardless of where the public resides, are equally as important, and the Forest Service may not dismiss concerns simply because the person lives in another portion of the country.

The Forest Service (USFS) claims that the purpose and need of the Metolius project is to:

"(1) Reduce the risk of catastrophic wildfire, insect, and disease; (2) Provide of the safety of people, and protect property, and tribal and natural resources; (3) Restore late-successional (old-growth) forest conditions; [and] (4) protect and restore watershed conditions."

Metolius Vegetation Management Project Final Environmental Impact Statement (Metolius <u>FEIS</u>), ROD-5. This goal is illusory and the analysis in the FEIS is unsound. The "forest health" justification for this project is inherently flawed due to the belief that logging a bruised landscape that is recovering from past clear-cutting and harvest can correct those bad management practices, including fire suppression. The underlying assumption that a forest is generally healthier if properly functioning parts of the forest are removed is similarly unsupported by fact. *Attachment 10, Forest Health Issues & Facts*.

Once vast stretches of east side mature and old-growth forest habitat have been reduced to a fragmented patchwork that is now sparsely woven together by remnant stands of late successional and old-growth forest and degraded riparian corridors. The analysis area includes some areas of rare old growth and mature habitat. The analysis area is especially important because it functions as a migration route and biological corridor among the planning area, uninventoried roadless areas, and other land ownerships that surround the planning area. *Attachment 13*, Pictures of Planning Area; *Attachment 14*, Field Surveys of Planning Area

The degradation of forest habitat has caused the precipitous decline of not only spotted owl populations, but also many other species dependent on large areas of interior old-growth forest habitat such as the northern goshawk, American marten, Pacific fisher, and numerous vascular and non-vascular plants. Species that also required large areas of intact, undisturbed forest habitat – like Lynx and Wolverine – are also at risk. These species continue to be pushed towards extinction by additional cutting and fragmentation of mature and old growth forest. Since the Deschutes National Forest has done little or no monitoring of sensitive and rare species on the forest, there are almost no studies on which the Forest Service or the public can rely for decision-making about resource use and allocation.

While the Sisters Ranger District does not seem to dispute that the impacts of logging have been significant, the DNF has failed to adequately quantify and qualify the impacts of the current proposal to log the critical threads of mature and old growth forest habitat connecting the planning area, roadless areas, and wilderness areas. The Metolius FEIS insufficiently identifies the impacts of the project and does not justify the intensiveness of proposed logging. That the planning area is experiencing the effects of a bad management by the Forest Service neither justifies the elimination of this vital habitat component, nor negates its critical importance for wildlife.

Given both the significant impacts of this project and the lack of evidence supporting the statements that negative impacts from the Metolius Timber Sale will be only short-term, the decision to implement the proposed project is arbitrary and capricious and violates the Administrative Procedures Act. The Metolius project would also violate the Clean Water Act, the Endangered Species Act, the National Environmental Policy Act, the National Forest Management Act, and the amended Deschutes National Forest Land and Resource Management Plan (Forest Plan or DLRMP).

I. The Metolius Timber Sale Will Not Meet the Stated Purpose and Need of the Project.

BMBP recognizes some need for restoration on the Metolius landscape due to the impacts of past logging, recreation, and fire suppression. The FEIS fails to show a viable need for the intensity of the prescriptions proposed. Specifically, the Forest Service fails to show why (1) reducing the well-spaced large, old-growth trees will contribute to fire reduction or protect communities; (2) the project is necessary when a project reducing 8 inch diameter and less trees has already been analyzed; and (3) white fir encroachment is unnatural at the site-specific level.

- A. The FEIS does not provide scientific evidence that the Metolius Timber Sale will meet the stated Purpose and Need of the project.
 - i.) The FEIS does not provide evidence that the project will reduce fire risk throughout the project area.

The Forest Service does not show how the proposal will actually reduce fire risk or contribute to forest health. The Forest Service's assumption of need is contrary to scientific opinion because it incorrectly assumes that harvesting all sizes of trees will necessarily decrease the risk of severe fire over time. The Forest Service fails to provide scientific support for the contention that live, large trees on the landscape increase fire risk. The Forest Service further fails to show how reduction of large trees will decrease risk of insect infestations or disease. NEPA requires the agency to briefly state a legitimate purpose and need for the project and support all contentions with high-integrity science. 40 C.F.R. §§ 1502.13; 1502.24. Further, the agency must provide a response to scientific evidence contrary to that presented in the environmental analysis. NEPA requires that the Forest Service "disclose responsible scientific opinion in opposition to the proposed action, and make a good faith, reasoned response to it." Seattle Audobon Society v. Lyons, 871 F.Supp. 1291, 1318 (W.D. Wash. 1994). Attachment 29, Draft Minimum Mandatory Guidelines for all Projects which Purport to be Restoration or Forest Health Projects in Interior Pacific Northwest Forests; Attachment 76, Fire Risk in Eastside Forests.

The Forest Service must acknowledge and discuss the existence of ongoing research projects throughout the West that address scientific uncertainty about logging effects on fire behavior (e.g., Skinner et al. 2001). The Blodgett Forest Study (Stephens 2001) is particularly relevant because it provides an excellent template for experimental design that the Forest Service should incorporate into "restoration" projects in the Metolius Conservation Area. There is significant uncertainty and controversy over the subject of logging and fire behavior, yet the Forest Service irresponsibly presents their logging as a tried-and-true solution to perceived changes in the local fire regime.

It is true that mechanical logging is widely promoted as a means to compensate for missing elements of defunct historic fire regimes and reduce "overly-dense stands" and excessive fuels" Arno & Allison-Bunnell 2002; Campbell & Liegel 1996; SNEP 1996; USDA/USDI 1998. Appellant agrees there is evidence to support light thinning as a high priority for reducing the hazard of severe wildfire and to restore forests to a healthier, more sustainable condition. Weatherspoon 1996. Nonetheless, The use of commercial thinning as a tool to reduce fire risk is controversial and experimental. DellaSala & Frost 2001; DellaSala et al. 1995; Henjum et al. 1994; Odion et al. in press. The Congressional Research Service tried but failed to

locate research documenting a relationship between timber harvest and decreased fire intensity or severity, even though the idea is logical and widely accepted. Gorte 2000a. Other independent variables such as weather and topography are critical factors in determining a fire's extent and severity. Gorte 2000a, Beaty & Taylor 2001; Bessie & Johnson 1995; Heyerdahl et al. 2001; Odion et al. in press.

In fact, numerous examples show that commercial logging actually *increases* risk of fire occurrence and severity. Commercially thinned stands in a mixed-conifer forest in the South Fork Trinity River watershed of the Klamath NF in northwest California burned more intensely and suffered higher levels of tree mortality than unlogged areas. Weatherspoon & Skinner 1995. In the Sierra Nevadas, researchers identified the effects of timber harvest on forest structure and microclimate as the most important factors responsible for an increase in potential fire severity. McKelvey et al. 1996; Weatherspoon 1996. In eastern Washington, thinning that was intended to reduce fire hazard had the opposite effect; logged areas showed increased rates of fire spread and greater flame lengths. Huff et al. 1995. Thinning treatments in the Rocky Mountain Front Range failed to prevent high intensity fire from overwhelming suppression forces and threatening residential communities outside Denver, Colorado. USDA 2002. Research indicates that tree thinning and biomass removal alone are unlikely to reduce fire severity in dense stands. Van Wagtendonk 1996.

Thinning may reduce total fuel loads (i.e., biomass), but it also opens forest canopies and allows increased solar radiation and wind to reach the forest floor. Agee 1996. The net effect reduces moisture and increases the flammability of surface fuels:

In the open, solar radiation impinges directly on the earth's surface. Because both the earth and the air above it are poor conductors, heat is concentrated at the surface and in the layer of air next to it. Ground fuels can thus become superheated. A mature, closed stand has a fire climate strikingly different from that in the open. Here nearly all of the solar radiation is intercepted by the crowns. Because of the lower temperature and higher humidity, fuels within closed stands are more moist than those in the open under ordinary weather conditions. [F]irebrands that do not contain enough heat to start a fire in a closed stand may readily start one in the open. Fires starting in the open also burn more intensely and build up to conflagration proportions more quickly since less of the heat produced by the fire is used in evaporating water from the drier fuels. Countryman 1955.

As logging creates large openings and reduced canopy cover conditions, adverse changes to fire climate and intensified fire behavior are likely. The FEIS must recognize potential for opened forest canopies to increase solar radiation, ground level wind speed, and surface fuel moisture and flammability. It also must address associated reductions in effectiveness of direct attack fire suppression tactics.

In addition, mechanical thinning generates large quantities of "slash" by transferring branches, twigs and needles from the canopy to the ground. Stephens 1998; USDA 1994; USDA 1989; van Wagtendonk 1996; Weatherspoon 1996. One researcher noted:

Timber harvesting removes the relatively large diameter wood that can be converted into wood products, but leaves behind the small material, especially twigs and needles. The concentration of these fine fuels on the forest floor increases the rate of spread of wildfires. Thus, one might expect acres burned to be positively correlated with timber harvest volume. Gorte 2000b.

The Metolius FEIS fails to indicate how much fuel will be left as slash upon completion of the project. The decision-maker and the public cannot know whether the project will actually result in a reduction of fire risk post-project.

Although removing small trees has been proven effective in reducing fire severity, no evidence exists showing the removal of large, old trees decreases fire risk. Fires rarely consume large tree boles but nearly always consume fine surface fuels including leaves, twigs and branches smaller than 3 inches in diameter. Agee 1996; Rothermel 1991. The primary variables that account for initiation of canopy fires are the surface fuel load, fine fuel moisture, and the vertical ground-to-crown height. Agee et al. 2000, van Wagtendonk 1996. The ability of a forest to resist canopy fire is dependent on the flammability of surface fuels, which directly influences flame length and fire intensity. Agee 1996. Thus, surface fuel treatments and pruning of ladder fuels to increase crown height above the ground should be the preferred means to reduce fire intensity and crown fire potential. Agee 2002, Agee et al. 2000, Stephens 1998, USDA 2001, van Wagtendonk 1996. Prescribed burning provides an effective method of reducing fine and ladder fuels because fire consumes the finest fuels that present the greatest hazard. Deeming 1990.

Mechanical thinning does not replicate natural fire disturbance in any way. Mechanical fuel treatments fail to mimic the ecological effects of fire, particularly its thermal effects on seed germination and nutrient cycling. Agee 1993; DellaSala et al. 1995. The Sierra Nevada Ecosystem Report to Congress stated:

Although silvicultural treatments can mimic the effects of fire on structural patterns of woody vegetation, virtually no data exist on their ability to mimic the ecological functions of natural fire. Silvicultural treatments can create patterns of woody vegetation that appear similar to those that fire would create, but the consequences for nutrient cycling, hydrology, seed scarification, non-woody vegetation response, plant diversity, disease and insect infestation, and genetic diversity are almost unknown. SNEP 1996.

Logging is not a surrogate for natural fire process. Ecological restoration requires not only reestablishment of desirable forest structure and composition but of the processes needed to sustain them for the long term. McIver & Starr 2001. Attempts to "mimic" natural disturbances with structural manipulations of forest vegetation in the absence of fire only serve to entrench fire exclusion policies and ensure long-term ecosystem deterioration. USDA 1995.

In summary, it is contrary to principles of wildland fire science to consider the least available fuel (tree boles) to be the seminal issue used to estimate fire intensity because tree boles are generally not consumed by fire. When tree boles are consumed, it is mainly by smoldering combustion, which does not contribute to fire intensity, as it is scientifically defined.

The Forest Service never cites to a single scientific study to support its contention that large diameter logs pose a fire hazard. NEPA requires the Forest Service to "make explicit reference by footnote to the scientific and other sources relied upon for conclusions" in the environmental document. 40 C.F.R. § 1502.24. Until the agency supplies this information, the Metolius FEIS is inadequate and should not be implemented.

The Forest Service's failure to even acknowledge science contrary to the purported "need" of the project violates NEPA's requirements. The Metolius FEIS also fails to disclose important information that contradicts the need for the Forest Service's proposed action. NEPA requires that the Forest Service "disclose responsible scientific opinion in opposition to the proposed action, and make a good faith, reasoned response to it." Seattle Audobon Society v. Lyons, 871 F.Supp. 1291, 1318 (W.D. Wash. 1994). Further, NEPA's disclosure goals are two-fold: (1) to ensure that the agency has carefully and fully contemplated the environmental effects of its action, and (2) to ensure that the public has sufficient information to challenge the agency's action. Inland Empire Public Lands v. U.S. Forest Service, 88 F.3d 754, 758 (9th Cir. 1996). The FEIS does not provide enough information for the public or the decision-maker to make a carefully and fully contemplated decision. Nor can the public be assured that the scientific quality of the information used to make this decision is of high quality. Consequently, the proposed action violates NEPA, and the decision to implement the Metolius Project is arbitrary and capricious. 5 U.S.C. § 706(2)(A).

Furthermore, the Forest Service claims that the project area is currently at risk of losing large trees. Although the agency cites scientific research to support its contention, the claim that "as inter-tree competition increases it is usually that large trees that die first" defies logic. The Forest Service does not attempt to explain this contention that appears to be contrary to every principle of basic ecology and species competition. NEPA requires the agency to ensure scientific integrity in environmental analyses. 40 C.F.R. § 1502.24. The science presented by the agency seems questionable at best. The Forest Service fails to provide a full citation to the supporting science (Dolph et. al. 1995) in the References and Citations section despite NEPA's explicit requirement that the agency "make explicit reference by footnote to the scientific and other sources relied upon for conclusions" in the environmental document. Metolius FEIS, 416; 40 C.F.R. § 1502.24.

ii.) The FEIS does not provide evidence that the project will reduce fire risk to homes and communities.

One purpose of the Metolius project is to "provide of the safety of people, and protect property" by reducing severe fire risk. Metolius FEIS, ROD-5. Despite these purported intentions, the Metolius project is likely to be inefficient and ineffective for community protection because wildland fuel reduction on public lands does not effectively reduce home ignitability on private lands. The DNF has not demonstrated that logging in remote locations far away from communities will be effective in protecting those communities. Home ignitability, rather than wildland fuels, has been determined to be the principal cause of home losses during wildland/urban interface fires. For example, Forest Service fire researcher Jack Cohen recently concluded that: "SIAM modeling, crown fire experiments, and wildland-urban interface fire case studies show that effective fuel modification for reducing potential wildland-urban interface fire

losses need only occur within a few tens of meters from a home, not hundreds of meters or more from a home." Cohen, 1999. This research indicates that home losses can be effectively reduced by focusing mitigation efforts on the structure and its immediate surroundings. Those characteristics of a structure's materials and design and the surrounding flammables that determine the potential for a home to ignite during wildland fires (or any fires outside the home) can be referred to as home ignitability.

Indeed, in order for a forest fire to ignite a house without reaching it directly, the fire must provide sufficient radiant hear for long enough to raise the temperature of the surface of the house to its ignition point. Studies and modeling have shown that partial removal of trees within 40 meters (132 feet) of the house protects it against radiant ignition from the flames of a forest fire that is torching and crowning. Cohen and Butler (1998), Cohen (2000a). These studies assumed severe conditions, and lesser distances may suffice. Thus, another study (Davis, 1990) found a precipitous drop in structural ignition with a distance of only 20 meters between the house and forest vegetation. Increasing the home site treatment to 60 meters (200 feet) would provide an extra margin of safety in areas with extreme slopes or extremely tall trees (neither of which exist in the Fall planning area), and would protect against scorching of exterior walls under extreme conditions. *Attachment 91, Effectively Treating the Wildland Urban Interface to Protect Houses and Communities from the Threat of Forest Fire*.

The evidence suggests that wildland fuel reduction for reducing home losses may be inefficient and ineffective: inefficient because wildland fuel reduction for several 100 meters or more around homes is greater than necessary for reducing ignitions from flames; ineffective because it does not sufficiently reduce firebrand ignitions. To be effective, given no modification of home ignition characteristics, wildland vegetation management would have to significantly reduce firebrand production and potentially extend for several kilometers away from homes. (Cohen 1999). Therefore, to most effectively protect communities at risk, fuels reduction efforts must be focused adjacent to structures and communities, not in remote locations miles from any structure. The Metolius Timber Sale will not meet the need to protect homes and communities. As noted *supra*, NEPA requires the Forest Service to briefly state a legitimate purpose and need for the project and support all contentions with high-integrity science. 40 C.F.R. §§ 1502.13; 1502.24.

Furthermore, if the Forest Service truly wishes to reduce fire risk to homes and communities, the agency should require all leased cabins and structures within the area to install metal roofs. The Forest Service fails to consider this as a viable option for truly reducing ignitability of the communities in the area.

B. The Forest Service fails to discuss the reduced need for the project.

The Forest Service admits that the agency already analyzed and approved a plan to remove trees "generally 8 [inch] diameter of less in plantations." <u>Metolius FEIS</u>, 207. This fact is only mentioned once, buried in the vegetation section under the effects of the No Action

alternative. The Purpose and Need section is devoid of any discussion of the thinning activities. Thinning small diameter trees in plantations can greatly reduce fire risk because it is this type of stand structure that most contributes to high severity, stand replacing crown fires. Weatherspoon 1996. Removal of small diameter trees from plantations is the type of activity Appellant supports because thinning is needed, effective, and does not create contention with the public. The prior thinning may have significantly reduced fire risk in the planning area, thus diminishing the purported "need" for the Metolius Timber Sale. NEPA's implementing regulations require the agency to "briefly specify the underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed action." 40 C.F.R. § 1502.13. The agency may not create a false need for the project in order to justify its implementation. The Forest Service must discuss these activities, as they make the agency's "need" appear even more suspect.

C. The Forest Service fails to analyze site-specific natural occurrences of white fir.

The Metolius Project proposes to harvest white firs up to 25 inches in diameter. Metolius FEIS, ROD17. The FEIS does not describe the current prevalence of white fir less than 25 inches in diameter, thus the public is unaware of what percent of stands will be harvested under this prescription. Although the ROD assures that not all white fir trees less than 25 inches will be removed, the proposal does not provide any limitations or restrictions on how many trees may be harvested. The Forest Service justifies this action because of historical differences in species composition and the current "dominance" of white fir over the last 50 years. Metolius FEIS, 110. The agency claims a "reduction of white fir in this type of ecosystem can help move towards species composition more within the natural range of variability." Id. at 204. The Forest Service does not provide site-specific evidence of the white fir's natural range. The FEIS does not acknowledge that some white fir may have historically existed in the Metolius project area ecosystem. The FEIS does not provide a site-specific Historic Range of Variability (HRV) analysis. In sum, the Forest Service cannot be sure that harvesting most white firs in the area will bring the project area closer to "stable" historic conditions. Again, the Forest Service must support contentions in environmental analyses with facts and science. 40 C.F.R. § 1502.24.

II. The Metolius Timber Sale fails to provide a reasonable range of alternatives.

NEPA mandates that an agency "shall to the fullest extent possible: use the NEPA process to identify and assess the reasonable alternatives to proposed actions that will avoid or minimize adverse effects of these action upon the quality of the human environment." 40 C.F.R. § 1500.2(e). NEPA also requires the USFS to "study, develop, and describe appropriate alternatives to the recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses available resources as provided by section 102(2)(E) of 40 C.F.R. § 1501.2 (c)." Id.

The Metolius FEIS, however, fails to give a meaningful evaluation of alternatives to the proposed action. Reasonable and practicable alternatives to the proposed action exist and have been identified in earlier comments by the Appellant and include a restoration-only alternative and thinning of overstocked plantations. Although the Forest Service claims this is a "restoration" project, commercially harvesting large diameter trees equates to much more than

just restoration. The alternatives considered in the FEIS were unreasonably narrow and did not allow a meaningful discussion of other means of achieving the purpose and need of the project. The highly restricted range of alternatives evaluated and considered violates the very purpose of NEPA's alternative analysis requirement, which is to foster informed decision-making and full public involvement. 42 U.S.C. §§ 4331, 4332(2)(E); 40 C.F.R. § 1508.9(b). *See also* Robertson v. Methow Valley Citizen's Council, 490 U.S. 332, 349 (1989). Further, the Forest Service formerly found a restoration-only, small diameter plantation thinning (8 inches in diameter or less) sufficient to meet the area's needs. Metolius FEIS, 207. The Forest Service arbitrarily dismissed this obviously legitimate option without any explanation.

By narrowly defining the action alternative, the Forest Service forecloses other potential projects in the planning area. The highly restricted range of alternatives evaluated and considered violates the very purpose of NEPA's alternative analysis requirement, which is to foster informed decision-making and full public involvement. 42 U.S.C. §§ 4331, 4332(2)(E); 40 C.F.R. § 1508.9(b). *See also* Robertson v. Methow Valley Citizen's Council, 490 U.S. 332, 349 (1989).

Environmental analysis documents must "[r]igorously explore and objectively evaluate all reasonable alternatives" to the project. 40 C.F.R. § 1502.14(a). The Council on Environmental Quality (CEQ), which promulgated the regulations implementing NEPA, characterizes the discussion of alternatives as "the heart of the environmental impact statement." 40 C.F.R. § 1502.14. A decisionmaker must explore alternatives in sufficient enough detail to "sharply defin[e] the issues and provid[e] a clear basis for choice among options by the decisionmaker and the public." Id. § 1502.14. All reasonable alternatives must receive a "rigorous exploration and objective evaluation . . . particularly those that might enhance environmental quality or avoid some or all of the adverse environmental effects." Id. § 1500.8(a)(4). The analysis of the alternatives must be "sufficiently detailed to reveal the agency's comparative evaluation of the environmental benefits, costs and risks of the proposed action and each reasonable alternative." Id.

The Ninth Circuit stated in <u>California v. Block</u> that "[a]s with the standard employed to evaluate the detail that NEPA requires in discussing a decision's environmental consequences, the touchstone for our inquiry is whether an EIS's selection and discussion of alternatives fosters informed decision-making and informed public participation." 690 F.2d 753, 767 (9th Cir. 1982). The purpose of the multiple alternative analysis requirement is to insist that no major federal project be undertaken without intense consideration of other more ecologically sound courses of action, including shelving the entire project, or of accomplishing the same result by entirely different means. <u>Environmental Defense Fund v. Corps of Engineers</u>, 492 F.2d 1123, 1135 (5th Cir. 1974); <u>Methow Valley Citizens Council v. Regional Forester</u>, 833 F.2d 810 (9th Cir. 1987), *rev'd on other grounds*, 490 U.S. 332 (1989) (agency must consider alternative sites for a project). The Ninth Circuit has concluded that "the existence of a viable but unexamined alternative renders an environmental impact statement inadequate." <u>Alaska Wilderness Recreation & Tourism v. Morrison</u>, 67 F.3d 723, 729 (9th Cir.1995).

Other courts have stated that in order to comply with NEPA, "the discussion of alternatives 'must go beyond mere assertions' and provide sufficient data and reasoning to

enable a reader to evaluate the analysis and conclusions and to comment on the EIS." <u>Citizens Against Toxic Sprays v. Bergland</u>, 428 F. Supp. 908, 933 (D. Or. 1977). A detailed and careful analysis of the relative merits and demerits of the proposed action and possible alternatives is of such importance in the NEPA scheme that it has been described as the "linchpin" of the environmental analysis. For this reason, the discussion of alternatives must be undertaken in good faith; it is not to be employed to justify a decision already reached. <u>Id</u>.

NEPA requires the agency to include a no action alternative as the environmental baseline for a project. 40 C.F.R. § 1502.14(c). However, NEPA also requires the agency to "rigorously explore and objectively evaluate all reasonable alternatives." Id. § 1502.12(a). In this case, the agency has clearly failed to explore all reasonable alternatives. By narrowly defining the action alternative, the Forest Service forecloses other potential projects in the planning area. The Forest Service should have considered thinning overstocked plantations throughout the planning area rather than regenerating old growth forests. This is a viable alternative that would meet the purpose and need of the Metolius timber sale, which is to move the planning area towards the historic range of variability. The agency indicates that it has already proposed a separate project to thin small diameter trees in plantations. As noted above, the Forest Service does not explain why further action is necessary. Expanding this true restoration-only project was never mentioned in the NEPA documentation for this project.

The Deschutes Forest Plan and associated documents clearly indicate that restoration is needed on the forest. Given these goals of the Forest Plan, it is inconsistent for the Forest Service not to include a genuine restoration alternative. Without considering an alternative that would help restore habitat conditions with the least amount of negative impacts, the Forest Service is not improving ecosystems, but instead contributing to the decline of sensitive terrestrial and aquatic species and their habitat.

Appellant concedes that NEPA "does not mandate particular results," but "simply provides the necessary process" to ensure that federal agencies take a "hard look" at the environmental consequences of their actions. <u>Robertson v. Methow Valley Citizens Council</u>, 490 U.S. 332, 350 (1989). We conclude that in this case, the Forest Service failed to take the necessary hard look at the environmental impacts of the Metolius Timber Sale and similarly failed to consider adequate alternatives to the proposed project.

II. The Metolius Timber Sale FEIS does not adequately consider the impacts of this project in violation of NEPA.

The Metolius FEIS does not provide enough information to determine the extent of indirect, direct, or cumulative environmental impacts associated with the Metolius project. Moreover, the FEIS does not furnish substantive and quantitative evidence showing this project will not cause serious and irreversible damage to soils, forest productivity, plant diversity, water quality, and wildlife habitat. In fact, the evidence strongly suggests that the project will cause significant impacts to these resources that preclude the implementation of the proposed project. Appellant reminds the agency once again that NEPA's disclosure goals are two-fold: (1) to insure that the agency has carefully and fully contemplated the environmental effects of its action, and (2) to insure that the public has sufficient information to challenge the agency's

action. <u>Inland Empire Public Lands v. U.S. Forest Service</u>, 88 F.3d at 758. The agency failed to provide sufficient information to meet either of these goals.

1. The Metolius FEIS Inadequately Analyzes the Impact to Aquatic Systems.

The analysis of existing conditions of the creeks and rivers in the planning area is not based on high quality science, fails to adequately describe the current conditions of these aquatic systems, and does not accurately represent the impacts on these systems from the proposed action. Impacts to watershed integrity from logging are described in numerous scientific articles. *See generally*, Jones and Grant 1996; Harr 1975; Harr 1979; Harr 1996; Wemple and Grant 1996; Beschta 197; Beschta 1984; and Beschta and Taylor 1988. The FEIS acknowledges that the water quality, quantity, and timing within the watershed have been altered, and that Alternative 3 would adversely impact water quality. Metolius FEIS, 322. Moreover, beneficial uses in the watershed (defined as municipal or domestic water supply, livestock watering, wildlife and fisheries habitat, and contact and non-contact recreation) have been adversely affected by past management activities on federal and private lands.

Appellant points out that there is a general lack of sufficient information surrounding the water quality in the planning area. A recent General Accounting Office study indicates that federal and state land management decisions are limited by the lack of information about the aquatic systems at issue. Attachment 44, Key EPA and State Decisions Limited by Inconsistent and Incomplete Data. There is no indication that the Deschutes National Forest has assessed the implications of this report or changed its management practices so as to comply with the recommendations in the GAO report.

The fact that there is no baseline against which to gauge the effects of the proposed project is problematic for several reasons. First, the USFS does not possess the amount of data that is necessary to issue a ROD. If adequate baseline data is missing, NFMA requires the agency to obtain it. 36 C.F.R. § 219.12(d). The Ninth Circuit has also held that "general statements about 'possible' effects and 'some risk' do not constitute a 'hard look' absent a justification regarding why more definitive information could not be provided." Neighbors of Cuddy Mountain v. United States Forest Serv., 137 F.3d 1372, 1380 (9th Cir. 1998).

The Forest Service acknowledges that the preferred Alternative 3 "may pose short-term watershed risk" from sediment and water yield. Metolius FEIS, 322. The FEIS fails to quantify this increase; instead the agency claims "there are no expected measurable adverse effects to watershed health in the long-term." Id. Based on the minimal information provided, neither the public nor the decision-maker can truly understand the effects of this proposal in the short-term. The FEIS proposes treatment in over 1200 acres of Riparian Reserves. The FEIS permits ground-based harvest methods and removal of up to 25 inch diameter trees on 250 acres in the Riparian Reserves. Id. at 53. The FEIS further prescribes larch "restoration" in the Riparian Reserves, resulting in up to 3 acre clear cuts. Id. at 47. Yet the Forest Service only claims these activities may pose a vague "short-term risk." The Forest Service must provide a more substantive analysis of the impacts of logging in the Riparian Reserves. Stating that "some risk" exists does not constitute the "hard look" required by NEPA. Neighbors of Cuddy Mountain v. United States Forest Serv., 137 F.3d at 1380. Furthermore, the FEIS acknowledges the watershed is sensitive

to sediment inputs. Because seasonal flows are low, the system does not have the natural "flushing" capacity to clean out accumulated sediment. <u>Metolius FEIS</u>, 36. The FEIS does not evaluate how the proposed project effects the watershed under these special conditions.

The Forest Service further failed to consider the cumulative effects of the project with past, present, and future projects in the Upper Metolius and Why-chus watersheds. Under NEPA, "significance exists if it is reasonable to anticipate cumulatively significant impacts on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts." 40 C.F.R. § 1508.27(b)(7). Furthermore, NEPA requires the agency to evaluate "cumulative actions, which when viewed with other proposed actions have cumulatively significant impacts and should therefore be discussed in the same impact statement." Id. § 1508.24(a)(2).

Several projects in the same watershed have cumulative impacts, which are defined as "the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions." 40 C.F.R. § 1508.7. Appellant appreciates that the Forest Service at times mentions that other activities are occurring on the Deschutes National Forest. However, the Metolius FEIS does not actually analyze the cumulative impacts of this project and other past, current, and foreseeable future projects, including timber sales, livestock grazing, herbicide use, mining project, off-road vehicle use, and other management activities.

Although the agency assesses the effect of the Eyerly fire itself, the Forest Service fails to mention the large salvage sale planned for the burn area. Research documents the substantial negative impact post-fire salvage logging has on watersheds and soils. Beschta et. al. 1995. The Forest Service fails to even acknowledge the aggregate impact that these two projects, which are likely to occur simultaneously and will have substantial impacts on the watershed in both the short and the long-term. The agency also fails to analyze the cumulative impacts of the McCache Vegetation Management Project, currently being litigated by the Oregon Natural Resources Council. This project proposes to harvest nearly 30 million board feet over 5000 acres. This project will occur in the same watershed and have a substantial effect on the watershed.

Further, the Forest Service fails to calculate the Equivalent Clearcut Area (ECA) correctly in determining the cumulative effect of water yield changes in the project area. The FEIS acknowledges that a debate surrounds using ECA methodology in the Metolius Basin area, however, the agency chooses to base the cumulative impacts analysis solely on the ECA results. The agency predicts ECA values to increase by up to 14.6 percent in some subwatersheds. Although an ECA threshold is unclear, research shows even small increases in ECA can have a measurable increase in water yield. Metolius FEIS, 332; Troendle and Leaf 1980. The Forest Service finds no significant predicted increase in water yield, despite a significant chance in increased water yield. Id. at 333. It is unclear whether these estimates include the larch openings or the 5 to 10 acre clearcuts created by white fir removal.

2. The Metolius FEIS Inadequately Analyzes the impact to forest fragmentation, biological corridors, and dispersal of late-successional species.

The Metolius FEIS fails to adequately assess the cumulative impacts of the present project and other adjacent projects on forest fragmentation, loss of habitat connectivity, and dispersal of late-successional species. Despite assertions to the contrary, the FEIS fails to support the conclusion in the ROD that the cumulative and direct impacts to species migration and dispersal would not be significantly affected by the Metolius Timber Sale. In fact, the Metolius Timber Sale would cause substantial environmental impacts.

Fragmentation is an important factor in declining biological diversity. Wilcove et al. 1986; Goodman 1987. Habitat fragmentation also seriously threatens the stability and persistence of wild populations because the size and isolation of remaining habitats increases the probability of extinction through demographic, environmental, or genetic stochasticity. Wiens 1976; Soule 1986. Additionally, habitat corridors have been identified as important features of landscape management that allow movement and thus recolonization, among high-quality habitats. Fragmented corridors may actually serve as a selective filter, allowing movement by some species and blocking movement of others. Noss 1991. *Attachment* 77, Corridors Affect Plants, Animals, and their Interactions in Fragmented Landscapes.

Although the FEIS proposes to create connectivity corridors, the Forest Service admits that corridors are not effective for some old growth dependant species such as owls. Metolius FEIS, 248. The Forest Service otherwise fails to acknowledge potential effects this project will have on habitat fragmentation. Fragmentation of habitat will affect a number of species including Canadian lynx, wolverine, spotted owl, and pacific fisher. The Forest Service also fails to discuss the effect of the concurrent and planned harvest and restoration proposals or recent fires on habitat fragmentation, like the McCache project and the Eyerly Salvage Sale in the same watershed. The Forest Service cannot claim that it adequately assessed the cumulative impact of present and future actions without fully analyzing the effects of these two projects. 40 C.F.R. § 1508.7. Without this information, there is no evidence that the agency took a "hard look" at the project's effect on fragmentation as required by NEPA. Neighbors of Cuddy Mountain v. United States Forest Serv., 137 F.3d at 1380.

3. The Metolius FEIS fails to properly analyze effects on species within the Metolius Timber Sale Area

The Metolius FEIS conducts a woefully inadequate review of impacts to wildlife from the proposed sale. The Metolius FEIS fails to adequately identify impacts that the sale would have on a number of wildlife species, including threatened, endangered, and sensitive species, by removing the down trees associated with this project. *Attachment 31, Blue Mountain Species of Concern and their Habitat.* Many of these species depend on down wood for survival; removing this valuable habitat component threatens the viability of these species. *Attachment 2, Pileated Fact Sheet; Attachment 3, Blackbacked Woodpecker Fact Sheet; Attachment 4, Whiteheaded Woodpecker Fact Sheet; Attachment 5, Three Toed Woodpecker Fact Sheet.* Consequently, the Forest service cannot ensure that it is providing for the viability for the species in the planning area as required by NMFA. 36 C.F.R. §§ 219.19, 219.26.

Indeed, recent literature indicates that leaving down wood in place should be a high priority, especially for wildlife habitat. *Attachment 35, Coarse Woody Debris and Wildlife Tree*

Bibliography. As noted previously, NEPA requires the Forest Service to discuss the value of coarse woody debris (CWD) as wildlife habitat, rather than timber volume. 40 C.F.R. § 1501.2(c). Unreasonably rushing to remove this habitat component violates the APA. 7 U.S.C. § 706(2)(A). Until an assessment of the value of course woody debris has been completed, the proposed project should be withdrawn.

The FEIS and ROD for the Metolius Timber Sale claim that the proposed project will move the planning area closer to the historic range of variability, which will benefit forest species. Not only is this statement unsupported by scientific fact as required by NEPA, but it also overlooks the fact that the planning area is already a properly functioning forest that supports all of the species that the FEIS claims will be benefited by logging and removing their habitat. 40 C.F.R. § 1502.24 (requiring the agency to "make explicit reference by footnote to the scientific and other sources relied upon for the conclusions in the statement"). Appellant recognizes that the planning area has been adversely affected by past management activities but dispute that the Metolius Timber Sale is the appropriate way to restore the area. Because the agency has not substantiated the appropriateness of the proposed project, the Forest Service should not implement the Metolius Timber Sale.

BMBP has additional wildlife concerns. First, it appears as though the Forest did not survey at all for Threatened, Endangered, or Sensitive species. Simply pretending that these species do not exist in the planning area does not alleviate the agency's duties under the Endangered Species Act. Endangered Species Act of 1973, 16 U.S.C. §§ 1531-1544 (1994). This is problematic for several reasons. First, the Endangered Species Act (ESA) requires the Forest Service to use the best available scientific and commercial data in assessing the impacts to species, which includes surveying for them. 16 U.S.C. § 1536(a)(2). Since population studies are lacking for the Metolius planning area, the Forest Service is precluded from determining that the project is not likely to adversely affect the listed species under section 7 of the ESA. *Id.* § 1536(b). Basing a ROD on "non-information" is unreasonable and violates the Administrative Procedure Act (APA). 5 U.S.C. § 706.

Second, the FEIS fails to conduct an adequate cumulative impacts analysis for wildlife species and their habitat. As the FEIS repeatedly points out, there is little "high quality" habitat in the planning area because the project area is located in the dry Eastside of the Cascades, and that whatever species exist there are using marginal habitat for nearly all life needs; the impact of this use is not known. Metolius FEIS, 131. Because species *are* using poorer quality habitat, removing that habitat has an even more significant impact on species than the removal of high quality habitat: because there is no more "fall back" (i.e., poorer quality) habitat available for these species to utilize when higher quality habitat is removed, it is unclear how wildlife species will be affected in the meantime. It is logical to assume that once the poor quality habitat is removed through this project, sensitive and interior forest-dependent wildlife in the planning area will be extirpated from the area, a result clearly not acceptable under NFMA.

Third, impacts to wildlife species in the short and midterm are not insignificant, and the agency failed to assess what these impacts would be. Because habitat will not be available for some time after completion of the project, it is unclear how wildlife species will be affected in

the meantime (although habitat conditions can be expected to have been degraded). Again, NFMA does not recognize this outcome as legally acceptable.

The Metolius project would cause nonlisted species to trend towards listing, and listed species to trend toward jeopardy. Gray wolf, Northern goshawk, Pileated woodpecker, American marten, Lynx, northern spotted owls, and wolverine are species about which the Sisters Rangers District lacks adequate information to conclude that the proposed project would not make their populations trend towards listing in violation of the ESA. *Sierra Club v. Martin*, 168 F.3d 1 (11th Cir. 1999). There is no evidence to support the conclusion that removing what remains of suitable habitat for wildlife species will benefit them. Indeed, the facts suggest that these species will be adversely affected in the short and long term.

The FEIS and ROD for the Metolius project state that the sale will remove down and standing dead trees, as well as live trees. The net effect of these events will be to remove nearly the entire forest habitat upon which a myriad of species depend. Even though much of their habitat has been degraded, Appellant notes that some species are beginning to recolonize the area, and that it is currently very susceptible to human intervention. Because there is no need to change the characteristics of the forest, there is no need to implement the Metolius Timber Sale.

A. Threatened, Endangered, and Sensitive species.

It is the stated policy of Congress that all Federal departments and agencies "shall seek to conserve endangered species and threatened species and shall utilize their authorities in furtherance of [this] purpose." Endangered Species Act of 1973, 16 U.S.C. § 1531(c)(1). The Supreme Court has clearly restated congressional policy stating that, "The plain intent of Congress in enacting this statute was to halt and reverse the trend toward species extinction, whatever the cost." *Tennessee Valley Authority v. Hill*, 437 U.S. 153, 184 (1978). The Forest Service's decision to proceed with the Metolius Timber Sale is inconsistent with the congressional mandate of the ESA.

Under the ESA, the Forest Service has the responsibility to "insure that any action authorized, funded, or carried out by such agency is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species...." As described *infra*, the record does not support the finding that the proposed sale would not likely adversely affect wolverines, goshawk, lynx, and spotted owls. The proposed sale would significantly exacerbate the degraded habitat conditions for these species that already exists on the DNF. The near absence of any information from surveys or monitoring of listed species makes a reasonable analysis of how this project and others proposed will cumulatively affect these species impossible.

1. California Wolverine.

The FEIS presents contradictory information on the status of the wolverine in the project area. First, the FEIS states that there are have been a number of confirmed sightings in the project area. Metolius FEIS, 136. Despite these sightings, the Forest Service later claims that there will be no direct effect on wolverines from the Metolius project because "no wolverine

have been detected in or adjacent to the project area." <u>Id</u>. at 260. These contrary statements are exemplary of the Forest Service's cursory analysis of the project's effects on the wolverine. The FEIS further states that fragmentation "may affect" the wolverine. <u>Id</u>. The FEIS acknowledges that much of the project area does not contain suitable habitat for the wolverine because habitat fragmentation is severe in the area. <u>Id</u>. at 136. Simply stating that the project "may affect" a species or creates some risk is insufficient under NEPA. <u>Neighbors of Cuddy Mountain v. United States Forest Serv.</u>, 137 F.3d at 1380.

Given the preceding analysis regarding fragmentation in the planning area, the FEIS fails to adequately analyze how the wolverine will be affected by the proposed project. Because the species utilizes the planning area for some life cycle needs, the Forest Service is required to address how the Metolius project will affect those needs and the species itself. The failure to do so violates NEPA and NFMA. 40 C.F.R. § 1502.16 (environmental consequences); 36 C.F.R. § 219.19 (fish and wildlife resources). Given the sensitive nature of this species, it is likely that the proposed project will decrease wolverine viability through the actual loss of habitat. This is inconsistent with the DNF Forest Plan as amended and NFMA because the project would cause wolverine populations trend towards listing. 36 C.F.R. § 219.19.

2. Northern Goshawk.

BMBP has several concerns regarding Northern goshawk. The FEIS proposes treatment in 86 percent of the goshawk focal area. Metolius FEIS, 278. Up to 3 acre larch clear cuts will also occur in the goshawk focal area. Id. at 277. The Forest Service finds only a "potential impact" to goshawk and their habitat. Id. The USFS fails to address impacts to this species such as whether or not Post Fledgling Areas (PFAs) will be logged, how adult Goshawk may be affected by the Metolius Timber Sale, or other direct, indirect, or cumulative effects to the species.

Because of the lack of discussion in the FEIS regarding this species, BMBP has several concerns. It is unclear how long it will take the planning area to regenerate to the point that the area is habitable by goshawk. It is unclear whether the planning area will be "suitable habitat" immediately post-project. If not, it is unclear what type of habitat will be available for goshawk use. Moreover, the FEIS fails to address the cumulative impacts of the proposed project along with past, present, and reasonably foreseeable future actions, including the McCache Vegetation Project, in violation of NEPA. 40 C.F.R. § 1508.7. The lack of a contemporaneous analysis will preclude the legal implementation of the project. *Blue Mountains Biodiversity Project v. Blackwood*, 161 F.3d 1208 (9th Cir. 1998) *cert. denied, Ochoco Lumber Co. v. Blue Mountains Biodiversity Project*, 119 S.Ct. 2337 (1999). The courts have also held that the failure to conduct a cumulative impacts analysis is fatal to a project. *Neighbors of Cuddy Mountain v. United States Forest Serv.*, 137 F.3d 1372 (9th Cir. 1998); *Idaho Sporting Congress v. Thomas*, 137 F.3d 1146 (9th Cir. 1998); *Muckleshoot Indian Tribe v. U.S. Forest Serv.*, 177 F.3d 800 (9th Cir. 1999).

Third, Appellant notes that goshawk reproduction needs are currently under investigation and are not known with great certainty. *Attachment 1, Goshawk Fact Sheet*. Consequently, viability thresholds for the birds are unknown, which prevents the Forest Service from

conclusively stating that adequate reproductive habitat will remain post-project. NEPA requires the agency to inform the public of this lack of information, and to state why more definitive information could not be obtained. 40 C.F.R. § 1502.24. Due to the lack of conclusive data regarding goshawk reproductive requirements, removing additional habitat in the Metolius project could cause goshawk number to decrease and result in a trend towards listing under the Endangered Species Act.

3. Canada Lynx.

BMBP is particularly concerned about the proposed project's effect on lynx. The FEIS claims that no lynx habitat exists in the area. There are recent sightings about ten air miles to the south east and to the north east of the project area. Within twenty air miles to the west, there are high reliability sightings on the Willamette National Forest. Positive lynx sightings have occurred in the last ten years on the Deschutes National Forest, to the west on the Willamette National Forest, and to the east on the Ochoco National Forest. There is historic evidence of lynx in these areas including positive occurrence records, lynx bounty claims, and Forest Service Wildlife Statistical Reports. Positive reports of lynx occur as far south as Modoc County, California, so it would be reasonable to assume that lynx could occur in the project area, or may have historically. Although it is plausible that lynx are rare in the project area (and in Oregon on the whole) due to bounties, aerial poisonings, and other efforts to eliminate them and other predators that were performed systematically for decades and not due to a lack of habitat, the FEIS does not acknowledge that current litigation surrounds the McCache Vegetation project's effects on lynx in the same watershed. Clearly, science contradicting the Forest Service's "best available science" exists, but the agency fails to acknowledge it. NEPA requires that the Forest Service "disclose responsible scientific opinion in opposition to the proposed action, and make a good faith, reasoned response to it." Seattle Audobon Society v. Lyons, 871 F.Supp. 1291, 1318 (W.D. Wash. 1994).). Attachment 81, FWS Letter to Deschutes RE: lynx.

4. Northern Spotted Owls

Appellant has several concerns about the direct and indirect impacts to spotted owls. First, as mentioned previously, the planning area is very fragmented because of past timber harvest. The FEIS proposes to further fragment 170 acres of nesting, roosting, and foraging habitat (RNF) by harvesting up to 12 inch diameter trees. The FEIS also includes treatment of 2184 acres to remove small diameter trees and 676 acres removing large trees (greater than 12 inches) in dispersal habitat. Despite this situation, the Forest Service claims that there will be only a "short-term" negative effect on the owl. It is unclear where the owl will go during this short term effect. The FEIS does not indicate how long it will take the habitat to return to fully functioning status.

The Forest Service lacks current spotted owl population baseline information. To avoid the taking or otherwise jeopardizing of listed species and/or the destruction or adverse modification of critical habitat, the ESA creates a process whereby all federal action agencies must consult with the Fish and Wildlife Service (FWS) before the action agency engages in actions that may affect critical habitat or a threatened or endangered species that may be present in the project area. 16 U.S.C. § 1536(a)(2). The action agency – here, the Forest Service – must

prepare a biological assessment that describes the anticipated impacts to the target species because of the project. *Id.* § 1536(c)(1). FWS then must issue a biological opinion that "shall... [e]nsure that any action authorized, funded, or carried out by such agency. . . is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of [critical] habitat...." <u>Id.</u> §§ 1536(a); (b).

As part of a biological opinion, the FWS must quantify the extent of the incidental take and the effect that the proposed action will have on a listed species' critical habitat. 16 U.S.C. \$ 1536(b)(4)(A)(i); (B)(i). To this end, the FWS must consider the impacts to the listed species from the proposed action in conjunction with past and present actions: the "effects of the action." 50 C.F.R. \$\$ 402.14(g)(2) – (4); 402.02. In nearly all cases of consultation on the DNF, FWS has adopted the Forest Service's biological assessment as FWS's determination of effect on the listed species.

The FWS has an affirmative obligation to independently assess the status of the spotted owl, as well as the proposed project's effect on the species. Consistently deferring to the Forest Service's assessment of that agency's impact to a listed species vitiates the consultation requirement of the ESA. 16 U.S.C. § 1536(b). Similarly, the Forest Service violates its own ESA requirement to independently ensure against jeopardy of a listed species and to use its authority to conserve listed species when it fails to require the FWS to adequately assess a propose project's impacts to those species. 16 U.S.C. § 1536(b).

The condition of the species and its habitat prior to the proposed action is known as the "environmental baseline" for the species. 50 C.F.R. § 402.02. The environmental baseline "includes all past and present impacts of all Federal, State, or private actions and other human activities in the action area; the anticipated impacts of all proposed Federal projects in the action area that have already undergone formal or early section 7 consultation; and the impact of State or private actions which are contemporaneous with the consultation in progress." Id. Without an adequate environmental baseline, FWS has no way of evaluating the present status of a listed species, and thus cannot rationally decide whether additional impacts on the species may not jeopardize its continued existence.

The failure to make a population-based analysis creates a significant level of uncertainty regarding the level of impact that this project will have on owls in the LSR and nearby lands. NEPA requires that when data is not available an agency should recognize the lack of data and explain why obtaining it was not feasible. 40 C.F.R. § 1502.22. The ESA prohibits the Forest Service from going forward with the proposed sale without ensuring that the project will not result in jeopardy to the species. In light of this, the ROD was unreasonably supported, and the FEIS should addressed population trends in relation to the Metolius and adjacent sales.

BMBP is aware that approval from FWS to implement a project indicates that FWS has determined that the project will not lead to jeopardy of the species. However, as stated previously, neither FWS nor the Forest Service have the environmental baseline to make an accurate assessment of whether the Metolius sale will in fact lead to jeopardy of the owl. Moreover, it is apparent that FWS has simply "rubber stamped" the biological assessment prepared by Forest Service for this sale, and has not conducted an in-depth analysis of the actual

impacts to the owl. We therefore urge the decision maker to withdraw the Metolius Timber Sale and to modify the sale to protect all dispersal, NRF, and interior forest habitat.

B. Management Indicator Species

NFMA requires the Forest Service to provide animal and plant diversity in the national forests. 16 U.S.C. § 1604(g)(3)(B). Forest Service regulations implementing this requirement direct the agency to manage forests for viable populations of native vertebrate and desired nonnative species. 36 C.F.R. § 219.19. The regulations define viable populations as a population that has "the estimated numbers and distribution of reproductive individuals to insure its continued existence is well distributed in the planning area." <u>Id</u>.

To ensure that viable populations are maintained, the Forest Service regulations also require that the agency identify management indicator species (MIS) and that "[p]opulation trends of the management indicator species will be monitored and relationships to habitat change determined." 36 C.F.R. § 219.19(a)(6). This monitoring is "essential to verify and, if necessary, modify the forest plan's assumptions about the effects of timber harvesting and other management activities on wildlife...In order to meet the monitoring requirement, planners will need to obtain adequate inventories of wildlife populations and distribution." Charles F. Wilkinson and H. Michael Anderson, Land and Resource Planning in the National Forests, 304 (1987).

The Ninth Circuit has stated that the duty to ensure viable or self-sustaining populations "applies with special force to 'sensitive' species." <u>Inland Empire Public Lands Council v. United States Forest Serv.</u>, 88 F.3d 754 (9th Cir. 1996) citing <u>Oregon Natural Resources Council v. Lowe</u>, 836 F.Supp 727, 733 (D.Or. 1993). NFMA clearly directs the Forest Service to create regulations to "insure research on and (based on continuous monitoring and assessment in the field) evaluation of the effects of each management system to the end that it will not produce substantial and permanent impairment of the productivity of the land." 16 U.S.C. § 1604(g)(3)(C); Sierra Club v. Martin, 168 F.3d 1 (11th Cir. 1999).

In light of this direction, NFMA's regulations require inventorying and monitoring on the National Forests under 36 C.F.R. §§ 219.12(d) and (k) as well as 36 C.F.R. §§ 219.19(a)(6), 219.26, and 219.19(a)(2). The regulations state "each Forest Supervisor shall obtain and keep current inventory data appropriate for planning and managing the resources under his or her administrative jurisdiction." Id. § 219.12(d). The regulations further require that "at intervals established in the plan, implementation shall be evaluated on a sample basis to determine how well objectives have been met and how closely management standards and guidelines have been applied." Id. § 219.12(k). To ensure biological diversity, the regulations specifically require that "[i]nventories shall include quantitative data making possible the evaluation of diversity in terms of its prior and present condition." Id. § 219.26.

The multiple mandates in NFMA and its implementing regulations requiring population monitoring and surveying is clearly unmet by the Forest Service on the DNF. Because of the difficulty in monitoring all the species on the forest, NFMA regulations recognized that management indicator species (MIS) could be used as surrogates for other species with similar

habitat needs. The DNF, however, has failed to even meet the minimal requirement to monitor MIS. The DNF's failure to survey for MIS violates NFMA. The Metolius Timber Sale should be withdrawn until the agency completes adequate surveys for species. 36 C.F.R. § 219.19.

C. Survey and Manage Species.

The FEIS indicates that surveys for survey and manage species have been completed and that some species were located. <u>Metolius FEIS</u>, 156. However, the FEIS does not indicate what mitigation and/or buffers would be required for these species. Appellant reminds the agency that sufficient buffers are required for all survey and manage C-3 species, and that these buffers must be identified in sale and NEPA documentation.

4. The Metolius FEIS does not have adequate survey data to support its findings.

As noted in each species discussion *supra*, the Deschutes National Forest failed to survey for Sensitive, Threatened and Endangered; Management Indicator species; or Survey and Manage Species, and therefore lacks the necessary information on which to base its ROD for the Metolius Timber Sale. Appellant does not believe that the DNF has to survey for every species that may be present in a project area in order to sign a ROD. Specifically, the agency failed to recently survey for: bufflehead, harlequin duck, Oregon spotted frog, wolverine, pacific fisher, white-headed woodpecker, flammulated owl, cooper's hawk, sharp-skinned hawk, red-tailed hawk, great blue heron, osprey, and American marten.

Such monitoring is required under NFMA, and NEPA requires the agency to use only high quality science and to obtain data when it is missing yet necessary to make an informed decision. 36 C.F.R. § 219.27(a)(6); 40 C.F.R. §§ 1503.24 (scientific accuracy), 1502.22 (incomplete or unavailable information). The failure to complete such monitoring means that the data is not collected, and the approximate population levels or trends of species on the Forest is unknown. Without such data, the DNF lacks the informed ability to issue a ROD, in violation of NEPA. 40 C.F.R. § 1500.1; Sierra Club v. Martin, 168 F.3d 1 (11th Cir. 1999); Idaho Sporting Congress, Inc. v. Rittenhouse, 305 F.3d 957, 974 (9th Cir. 2002).

5. The Metolius FEIS inadequately analyzes impact to soils.

One of the most concerning issues with the Metolius Timber Sale is the impact to already detrimental soil conditions. The FEIS estimates that one-third of the entire planning area has sensitive soils. Metolius FEIS, 172. Over 60 percent of the units planned for treatment have detrimental soil conditions. Id. at 175. Of the 238 units where the Forest Service proposes ground-based harvest systems, 142 units have detrimental soil conditions (59 percent). As the DNF is aware, the DLRMP prohibits detrimental soil conditions on more than 20 percent of the area. Id. at 178. Despite the elevated detrimental soil conditions, DNF proposes ground-disturbing harvest methods that will compact and erode already unstable soils. Attachment 12, Soils and Logging in Eastern OR.

The FEIS estimates that thinning prescriptions can cause "less than 20 percent detrimental soil disturbance" and mechanical harvest and machine piling can cause a 15 percent

increase in detrimental soil conditions. <u>Id.</u> at 341; 346. Under preferred Alternative 3, 20 percent of the "areas" would maintain existing soil conditions; 33 percent of the areas would have detrimental soil conditions increase, but "detrimental soil conditions would remain within the Forest Plan standards of 20 percent"; and 47 percent would result in net improvement of soil quality. <u>Id.</u> at 349. The FEIS does not provide acreages of detrimental soil, nor does the document define what an "area" represents. It is unclear how pervasive the detrimental conditions truly are. The unit-by-unit estimated soil impact shows immediately after the project, 226 of the 290 units will exceed the 20 percent detrimental soil condition limit. <u>Id.</u> at 361. That equates to 78 percent of the proposed units. NFMA does not allow short term violations of the statute. *See* <u>Pacific Coast Federation of Fisherman's Associations v. National Marine Fisheries Service</u>, 253 F.3d 1137, 1146 (9th Cir. 2001). NFMA states that if Forest Plan standards cannot be met, then the proposed project should not take place. 16 U.S.C § 1604(i); 36 C.F.R. § 219.10(e); <u>Inland Empire Public Lands Council v. U.S. Forest Serv.</u>, 88 F.3d. 754 (9th Cir. 1996); <u>Neighbors of Cuddy Mountain v. U.S. Forest Serv.</u>, 137 F.3d 1372, 1377 (9th Cir. 1998).

The FEIS assures the public that special guidance will be used in area where activities are expected to cause damage exceeding LRMP standards. The Forest Service does not specify what this special guidance will look like, beyond basic BMPs. Although BMPs will be applied, mitigation is not assured. Even after the mitigation and restoration measures are applied, the FEIS still estimates 132 of the units will have soil conditions beyond the 20 percent limit. Metolius FEIS, 361. That equates to 45.5% of the units. Although the FEIS estimates that none of the units' soil conditions will worsen, it seems suspect that every unit impacted (some by an increase of 10 percent) will conveniently be back to the same conditions as it was before the treatments. Id. The DNF is currently violating LRMP soil standards. Proposing a large, ground-based timber sale project on these conditions is irresponsible and a blatant violation of NFMA. 16 U.S.C. § 1604(i); 36 C.F.R. § 219.10(e).

6. The Metolius FEIS inadequately analyzes the impact to endemic plants

The Forest Service fails to discuss the impact the Metolius project will have on sensitive plant species. Peck's penstemon is a rare, endemic flower found only in the Metolius area. Metolius FEIS, 165. The Metolius Conservation strategy names Peck's penstemon as a focal species. Id. The Conservation strategy identifies 25 populations of the plant as "protected," meaning management actions must benefit the plant. An unidentified number of plants are "managed," meaning experiments can be done on the plants, as long as tools used will likely benefit the plant. The FEIS provides "thinning without ground disturbance" as an example of beneficial tools. Id. at 166. The FEIS does not identify even the rough location of these populations.

The FEIS finds the negative environmental effects of logging near penstemon populations will be "short-term" impacts from invasive weeds and trampling. Metolius FEIS, 304. Appellant questions how invasive weed competition can be considered a "short-term" impact, as the effect may not be immediate but would be difficult to remedy over the long term. Negative impacts of the project may occur in areas where 60 percent of the "protected" populations exist. Although the Forest Service claims management of "protected" penstemon

allows "some loss" of plants, loss should be minimal. <u>Id</u>. at 165. The Forest Service does not explain how it will meet this requirement.

As part of NEPA's two-fold goals, the statute requires the agency to provide sufficient information for the public to be able to challenge the proposed action. <u>Inland Empire Public Lands v. U.S. Forest Service</u>, 88 F.3d at 758. The agency fails to provide enough information to ensure to the public that protected and managed penstemon populations will be properly protected. Further, the Metolius Conservation Strategy was adopted into the DLRMP. NFMA requires that site-specific projects conform with Forest Plan guidelines. 36 C.F.R. § 219.10(e). The agency failed to ensure to the public that the Metolius project is in accordance with the DLRMP for management of Peck's penstemon.

7. The Metolius FEIS inadequately analyzes the impact to vegetation.

The ROD for the Metolius Timber Sale chooses to implement 16 inch diameter caps for most trees in the project. The ROD creates exceptions for white fir up to 25 inches in diameter and any tree species in larch openings. <u>Id</u>. at 17. The Forest Service admits that these caps are arbitrary. Citing the disagreement over the definition of large tree, the Forest service admits their own definition is of a "large tree" is "subjective." <u>Metolius FEIS</u>, 34. The ROD's reasoning for choosing a 16 inch is that the cap "will help meet the purpose and need" of the project by further reducing ladder fuels and stand densities. The ROD does not explain why it deemed a 16 inch cap effective instead of a 12 or 8 inch cap. Although BMBP supports diameter caps that focus the project on the small diameter plantations, an arbitrary decision to implement a 16 inch cap is not in accordance with NEPA. NEPA requires the agency to provide a reasoned explanation of the rationale for the decision. 16 U.S.C. §§ 1536, 1538; 5 U.S.C. § 706(2)(A).

IV. The Metolius Salvage Sale violates the Northwest Forest Plan.

In April of 1994, after years of controversy over logging the public lands of the Pacific Northwest, the Secretaries of Agriculture and Interior signed the Record of Decision to implement the Northwest Forest Plan (NWFP). The NWFP provides standards and guidelines for management of habitat for late-successional and old-growth forest related species within the range of the northern spotted owl. The Record of Decision amended the resource management plans of National Forests and Bureau of Land Management (BLM) lands within the range of the northern spotted owl, including the Deschutes National Forest. Two important provisions incorporated into the NWFP are the Late-Successional Reserve (LSR) guidelines and the Aquatic Conservation Strategy (ACS).

The NFMA requires that each of these provisions be applied for every project in the Deschutes National Forest. 36 C.F.R. § 219(e). The Metolius Timber Sale violates the LSR guidelines, the ACS, and Riparian Reserve Guidelines. As a result, the Metolius FEIS must be withdrawn until the proposal complies with NFMA. 36 C.F.R. § 219.10(e).

1. Intense commercial harvest in the LSR violates NFMA.

The Late-Successional Reserve (LSR) guidelines are central provisions of the NWFP. The objective of the LSRs is to protect and enhance the conditions of old-growth forests that serve as habitat for the northern spotted owl by creating a network of large "reserves" or blocks of habitat. NWFP Standards and Guidelines, C-9. Although some silvicultural activities are permitted in LSRs east of the Cascades, activities "shall focus" on young stands. NWFP Standards and Guidelines, C-12. If activities in older stands are necessary to reduce risk of large-scale disturbances, three strict criteria must be met: (1) the proposed activities will clearly result in greater assurance of long-term maintenance of habitat; (2) the activities are clearly needed to reduce risks; and (3) the activities will not prevent the LSR from playing an effective role in the objectives for which it was established. Id. at C-13.

The Metolius FEIS failed to satisfy the requisite criteria required by the NWFP to permit the Forest Service to remove large trees greater than 80 years old from the landscape. As discussed in the Purpose and Need section, *supra*, the DNF failed to show a significant need to reduce fire risk in late successional and old growth structural stands. Much less did DNF show a "clear" fire risk to old growth stands. Science indicates fire risk is greatest in dense, small diameter plantations, not in mature, old forest stands. Weatherspoon 1996.

Further, the FEIS fails to show the project will "clearly result in long-term maintenance of habitat." NWFP Standards and Guidelines, C-13. As discussed in the fragmentation section, *supra*, the Forest Service failed to adequately assess the effects of the Metolius project on connectivity for old-growth dependant species. The FEIS does not disclose where these species will go while the "short-term" impact to their habitat occurs. Although the Forest Service claims habitat will eventually improve in the long-term, it is questionable whether continued harvest will allow species to be able to persist into the long-term.

Lastly, the FEIS fails to show how the Metolius Timber Sale will *not* prevent the LSR from playing an effective role in the objectives for which it was established. NWFP Standards and Guidelines, C-32. As noted, the objective of the LSRs is to protect and enhance the conditions of old-growth forests that serve as habitat for the northern spotted owl by creating a network of large "reserves" or blocks of habitat. Id, at C-12. Commerical timber harvest with the intense prescriptions proposed in the Metolius project clearly do not comply with promoting the concept of "reserves." The Metolius FEIS proposes to commercially harvest 21 million board feet of timber from the Metolius LSR. The Forest Service purports to establish a 16 inch diameter limit for harvest but numerous exemptions exist. For instance, white fir up to 25 inches in diameter may be removed. These are not "young" stands, as the NWFP requires the focus to be. The Forest Service admits that the commercial timber sale in the LSR is being used to fund the restoration projects. Metolius FEIS, 78. Although BMBP recognizes the Forest Service is under budget constraints to complete restoration projects, the NWFP prohibits logging in the LSR that is not solely intended to reduce fire risk. NWFP Standards and Guidelines, C-9. Intense commercial extraction should never take place in LSR.

Furthermore, the FEIS proposes 735 acres of larch restoration which will result in 3 acre clearcuts. Metolius ROD, 14. Although the Forest Service claims larch restoration will "accomplish some additional risk reduction and forest health objectives" by reducing dwarf mistletoe and stand density, the Forest Service does not explain how this restoration will further

LSR objectives. Harvesting trees greater than 80 years old in the LSR without showing that the harvest will clearly assure long-term maintenance of habitat, reduce risks and not prevent the LSR from playing an effective role in the objectives for which it was established violates the NWFP, the DLRMP, and NFMA. 36 C.F.R. § 219(e).

2. The Metolius project violates ACS Objectives.

The Northwest Forest Plan also adopted the Aquatic Conservation Strategy (ACS), aimed at restoring and maintaining the ecological health of watersheds and aquatic ecosystems on public lands. To accomplish this goal, the ACS stresses the importance of maintaining the aquatic ecosystems and processes to which aquatic organisms have adapted. The NWFP requires the Forest Service to maintain connectivity for aquatic and terrestrial species through the ACS Objectives, maintenance of connectivity corridors, and implementation of the Late Successional Reserve system. *Northwest Forest Plan Standards and Guidelines (NFP S&Gs)*, B-13.

Site-specific plans must meet the ACS Objectives at both the site-specific and watershed level. Pacific Coast Federation of Fisherman's Associations v. National Marine Fisheries Service, 253 F.3d at 1146. Projects must also meet the ACS Objectives in the short- and long-term. Id. The Metolius FEIS fails to show how the project will meet some ACS Objectives, or acknowledges the Objectives will not be met in the short term. This action constitutes a violation of the ACS Objectives, the NWFP, the Deschutes LRMP, and NFMA. 36 C.F.R. § 219(e).

ACS Objective 2 specifically requires the agency to "maintain and restore spatial and temporal connectivity within and between watersheds." NWFP S&G at B-11. The Forest Service fails to indicate whether the proposed Metolius Timber Sale will meet this Objective. The ACS requires that the agency determine whether the project will meet each ACS Objective. If the project does not meet the Objectives, the project should not be implemented. Id. at B-10. Clearly the planning area is already suffering the effects of poor land management, and the agency admits that the Metolius project will exacerbate this situation. The Forest Service admits that the action alternatives would reduce habitats for species that have requirements for more closed forest conditions in riparian reserves. Not only is the planning area already very fragmented, but the proposed project also will remove 21 million board feet of habitat from the landscape. Without a clear indication of whether the project is consistent with ACS Objectives, neither the decision-maker nor the public can be sure the project complies with the Deschutes LRMP and NFMA. Inland Empire Public Lands v. U.S. Forest Service, 88 F.3d 754, 758 (9th Cir. 1996); 36 C.F.R. § 219(e). Given the significant fragmentation in the planning area, the decision to implement the Metolius project is arbitrary and capricious. 5 U.S.C. § 706(2)(A).

ACS Objective 3 requires the agency to "maintain and restore the physical integrity of the aquatic system, including shorelines, banks, and bottom configurations." NWFP S&G at B-11. The agency claims that all action alternatives would meet ACS Objective 3. As noted *supra*, the Forest Service failed to provide an adequate assessment of water yield resulting from the project. As such, the Forest Service cannot be sure that the project will meet Objective 3 in the short- and long term as required by the NWFP. Pacific Coast Federation of Fisherman's Associations v. National Marine Fisheries Service, 253 F.3d at 1146.

ACS Objective 4 require the agency to "maintain and restore water quality necessary to support healthy riparian, aquatic, and wetland ecosystems. Water quality must remain within the range that maintains the biological, physical, and chemical integrity of the system." NWFP S&G at B-11. The Forest Service claims that all action alternatives will meet ACS Objective 4 but admits that prescribed fire may increase ash sediment and nutrient loading may occur in the "short-term." As noted *supra*, the Forest Service failed to provide an adequate assessment of sediment resulting from the project. As such, the Forest Service cannot be sure that the project will meet Objective 3 in the short- and long term as required by the NWFP. Further the Forest Service admits that short-term decreases in water quality may occur. This is *not* permitted under the NWFP, as interpreted in Pacific Coast Federation of Fisherman's Associations v. National Marine Fisheries Service. 253 F.3d at 1146. By permitting short-term reductions in water quality, the Metolius project violates the ACS Objectives, the NWFP, the Deschutes LRMP, and NFMA. 36 C.F.R. § 219(e).

3. The Metolius Project Violates Riparian Reserve Standards and Guidelines.

The proposed Metolius project fails to comply with Riparian Reserve Standards and Guidelines incorporated into the Northwest Forest Plan. The Northwest Forest Plan created the Riparian Reserves to regulate and prohibit activities that retard or prevent attainment of the ACS Objectives. MWFP S&G at B-12. Riparian Reserves are used to maintain and restore riparian structures and functions of intermittent streams, confer benefits to riparian-dependant species other than fish, and enhance connectivity corridors. Id. at B-13. The Riparian Reserves specifically prohibit timber harvest except in three situations. The Forest Service fails to identify which of these exceptions apply to the Metolius Timber Sale. Further, the Riparian Reserves prohibit actions that prevent attainment of ACS Objectives. As noted above, the Metolius Timber Sale prevents attainment of numerous ACS Objectives at the site-specific level. Violating the Riparian Reserve Standards and Guidelines constitutes a violation of the Deschutes LRMP and NFMA. 36 C.F.R. § 219(e).

V. The Deschutes National Forest must supplement the FEIS with new information.

NEPA requires that the agency prepare supplemental environmental documentation if there are significant new circumstances or information affecting the proposed action. 40 C.F.R. § 1502.9(c), 46 Fed. Reg. 18,026 (1981) ("CEQ 40 Questions"). Appellant is aware of two recent fires in or surrounding the Metolius planning area, the Bear Butte fire and the Booth fire (the B & B Complex). Appellants are aware that these fires have already burned a significant number of acres and continue to burn today. Regardless of whether these fires occurred in or near the planning area, the fires present significant new circumstances that drastically alter the Metolius planning area ecosystem. The agency must analyze the impacts of the fires' severity, fire fighting activities, fire rehabilitation, effects on soil including sedimentation and compaction, habitat disturbance, microclimatic changes, alteration in vegetation including canopy cover and openings, or coarse woody debris loss at the project site. The baseline by which the agency compared the Alternatives in the Metolius FEIS may have changed significantly. The purpose and need for the project may have been satisfied or altered. The RNF and dispersal habitat for the northern spotted owl and other threatened and endangered species may have been

diminished, causing further fragmentation on the landscape. Further, the agency must examine the heightened cumulative effects of the fire in conjunction with the proposed project. The two fires present significant new circumstances; thus NEPA requires the agency to prepare supplemental documentation. 40 C.F.R. § 1502.9(c).

CONCLUSION

The Metolius Timber Sale analysis area provides important aquatic and terrestrial habitat for a multitude of species. However, the proposed project and adjacent past and present projects would log a significant remaining stretch of forest that facilitates wildlife movement in a landscape that has been highly fragmented by the pursuit of old growth timber at the cost of multiple use values such as wildlife and recreation. While many opportunities for thinning of second growth forest exist and are in fact encouraged, the DNF continues to focus on logging mature and old growth forest.

Although it has spent significant amounts of time, energy, and money on logging, the DNF has spent little energy trying to evaluate the existing state of the forest in light of decades of forest liquidation. Information about non-game sensitive and listed wildlife species is seriously lacking. Habitat conditions strongly indicate that the DNF is not providing for viable populations of spotted owl, gray wolf, pileated woodpecker, pine marten, lynx, fisher, and numerous other species affected by high road densities and the near-total loss of interior forest habitat in almost all sub-basins. Water quality information is lacking, but what information does exist indicates that serious turbidity and temperature problems exist. Exotic weeds are spreading throughout the forest and decreasing wildlife habitat value, exacerbated by grazing that destroys soil resources.

In light of these deficiencies, the DNF should withdraw the Metolius Timber Sale Record of Decision and Final Environmental Impact Statement. The agency should reassess the effects of the project on water, wildlife, and soils. The DNF should also begin surveys of MIS, listed, and sensitive species on a forest-wide basis. Anything short of this ignores the multiple use objectives of NFMA, and the ESA's and NEPA's requirement of high quality science, leaving the DNF with little basis for concluding the Forest is meeting the requirements of the National Environmental Policy Act, Clean Water Act, Endangered Species Act, National Forest Management Act, Northwest Forest Plan, and the Deschutes National Forest Land and Resource Management Plan.

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